

Attachment H

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: Panoche/Silver Watershed Stewardship Enhancement Feasibility Study

Applicant Name: Mr. Morris "Red" Martin, Westside Resource Conservation District

Mailing Address: 3763 East Robinson, Fresno, CA 93726

Telephone: (209) 227-2489

Fax: (209) 227-0215

Amount of funding requested: \$ 960,480 for 1.5 years

Indicate the Topic for which you are applying (check only one box). Note that this is an important decision: see page _ of the Proposal Solicitation Package for more information.

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment | <input type="checkbox"/> Fish Passage Im |
| <input type="checkbox"/> Floodplain and Habitat Restoration | <input type="checkbox"/> Gravel Restoration |
| <input type="checkbox"/> Fish Harvest | <input type="checkbox"/> Species Life History Studies |
| <input checked="" type="checkbox"/> Watershed Planning/Implementation | <input type="checkbox"/> Education |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities | |

Indicate the geographic area of your proposal (check only one box):

- | | |
|---|--|
| <input type="checkbox"/> Sacramento River Mainstream | <input type="checkbox"/> Sacramento Tributary: |
| <input type="checkbox"/> Delta | <input type="checkbox"/> East Side Delta Tributary: |
| <input type="checkbox"/> Suisun Marsh and Bay | <input checked="" type="checkbox"/> xx San Joaquin Tributary: <u>Panoche Creek</u> |
| <input type="checkbox"/> San Joaquin River Mainstream | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Landscape (entire Bay-Delta watershed) | <input type="checkbox"/> North Bay: |

Indicate the primary species which the proposal addresses (check no more than two boxes):

- | | |
|--|--|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Winter-run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Green sturgeon | |
| <input checked="" type="checkbox"/> xx Migratory birds | |

Panoche/Silver Creek Watershed Stewardship Enhancement Feasibility Study
CalFed Ecosystem Restoration Proposal, July 1998

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Indicate the type of applicant (check only one box):

State agency

Public/Non-profit joint venture

Local government/district

University

Federal agency

xx Non-profit

Private party

Other:

Indicate the type of project (check only one box):

xx Planning

Monitoring


Research

Implementation

Education

By signing below, the applicant declares the following:

- (1) the truthfulness of all representations in their proposal;
- (2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and
- (3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section ILK) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.


(Signature of Applicant)

Executive Summary

Project title and Applicant Name: The Panoche/Silver Creek Watershed Stewardship Enhancement Feasibility Study. The applicant is the Westside Resource Conservation District.

Project Description & Primary Biological/Ecological Objectives: On the West Side of the San Joaquin Valley, floodwaters from Panoche and Silver Creeks have historically created flooding and sedimentation problems for Mendota and surrounding agricultural lands. The Panoche/Silver Creek Watershed is a principal source of selenium, salts, and other trace elements, which continue to contaminate the soils and groundwater in the Panoche alluvial fan and the San Joaquin River.

The Panoche/Silver Creek Coordinated Resource Management and Planning (CRMP) team is working towards a total watershed management approach to minimize damage to the watershed by decreasing destruction and improving riparian habitat, reduce flood flows and channel instability, and improves water quality concerns and upland management practices.

Approach/Task/Schedule: To develop realistic management strategies to reduce continual water quality problems, erosion/sediment movement, and flooding impacts in the entire watershed. An eighteen month feasibility study and NEPA/CEQA review will be conducted, beginning March 1999, to analyze alternatives and identify options to achieve this goal.

Justification for Project and Funding by CALFED: The Panoche/Silver Creek Watershed is a principal source of selenium, salts, and other trace elements, which continue to contaminate the soils and groundwater in the Panoche alluvial fan and the San Joaquin River. The CRMP would use the Calfed grant to evaluate several habitat restoration and contaminant reduction alternatives.

Budget Costs and Third Party Impacts: The projected costs are \$800,400 for a feasibility study and \$160,080 for a NEPA/CEQA review. Residents, habitat, and wildlife within the watershed will experience short-term impacts during project implementation. However, all parties effected will benefit with the long term benefits of resolving the water quality, flooding and sediment movement problem in the watershed.

Applicant Qualifications: The CRMP has demonstrated its ability to obtain funding and complete projects in a timely manner. After receiving an EPA grant in 1995, the CRMP hired a full-time coordinator to enhance the completion of the goals established. The CRMP has also achieved a 205 (J) grant for a Sedimentation Study, achieved funding to construct a gaging station on Panoche Creek and the I-5 bridge, completed a literature review of all the studies completed on the watershed, and is coordinating a Clinic Program through the California State University at Fresno.

Monitoring & Data Evaluation: Water quality monitoring throughout the watershed is ongoing, and will continue throughout the implementation phase of this project. The success of the habitat restoration projects will be monitored seasonally, based on their ability to withstand flood impacts and increase migratory birds and wildlife habitat. A monitoring plan will be included in the NEPA/CEQA process, using an adaptive management approach to determine whether objectives are being met. Implementation of the various project components will be phased to incorporate monitoring data into the project design.

Local Support/Coordination with other Programs/Compatibility with CALFED objectives: Landowners in the upper watershed have expressed a willingness to develop alternative management practices on their property, and several are currently implementing pilot sedimentation and erosion control projects. Through cooperative efforts of state and federal agencies and water districts, a full-time coordinator works to achieve the CRMP's goals, a sedimentation study, being administered by Mendota, will come to fruition this Fall and with assistance from BLM, USGS, local water districts and local landowners, construction, operation and maintenance of a gaging station on Panoche Creek is completed and continuing another year. Panoche Creek is a tributary to the San Joaquin River, improvements in the Panoche/Silver Creek watershed will assist the CalFed Bay-Delta Program in achieving the goal of reducing the effects of stressors that inhibit ecological processes, habitats and species in the Bay-Delta ecosystem. Additionally, improving the watershed ecosystem will improve neotropical migratory bird habitat and reduce the continually increasing selenium laden sediment and contaminant contribution to the San Joaquin River.

Title Page

Title of Project:

The Panoche/Silver Creek Watershed Stewardship Enhancement Feasibility Study.

Applicant:

Westside Resource Conservation District
Attn: Mr. Morris "Red" Martin
3763 E. Robinson
Fresno, CA 93726-5917
Phone (209)227-2489
Fax (209)227-0215

Tax Status:

501 C.3. Non-Profit

Participants/Collaborators in Implementation:

Westside Resource Conservation District (Lead Agency)
California Department of Water Resources*
U.S. Bureau of Reclamation*
Silver Creek Drainage District
Local Water Districts
City Officials and Residents of Mendota
Ranchers in the Upper Watershed
Farmers in the Lower Watershed
U.S. Bureau of Land Management*
Natural Resources Conservation Service*
California Department of Transportation*
Fresno County Public Works Department
California State University, Fresno, Clinic Program

* These State and Federal agencies will coordinate their NEPA/CEQA reviews with the independent contractor.

Project Description

Project Description and Approach

On the West Side of the San Joaquin Valley, floodwaters from Panoche and Silver Creeks have historically created flooding and sedimentation problems for Mendota and surrounding agricultural lands. Not only have the floodwaters caused serious problems for the city of Mendota, each flood continues to deposit contaminated sediments on the Panoche Creek alluvial fan, damaging thousands of acres of agricultural land, (see Plate 3-6). The Panoche/Silver Creek Watershed is a principal source of selenium, salts, and other trace elements, which continue to contaminate the soils and groundwater in the Panoche Creek alluvial fan and the San Joaquin River. Agriculture is the main source of employment for the small rural community of Mendota. The unemployment rate for Mendota has reached 42 percent, flooding of agricultural land further exacerbates the unemployment problem by delaying the time when full agricultural employment occurs. For many farmers the 1998 flood cleanup, land re-leveling, and other preparatory work delayed the normal agricultural employment activities by almost two months. The cleanup and lost revenue damages exceeded \$1,500,000.

Local, State and Federal agencies, as well as the water districts, are impacted by flooding and sediment from Panoche Creek. State and county roads in and around Mendota have been and continue to be damaged by flooding. Caltrans and the County Public Works Department must provide additional crews to remove the sediment from the roads, as well as additional monitoring and inspections of Highways 33 and 180 and county roads during flood events. The Interstate 5 bridge at Panoche Creek must also receive additional inspections during these high flow events. Westlands, Broadview and Firebaugh Canal Water Districts were also impacted by the 1998 flooding. Damage to distribution lines and extensive sediment buildup in the water transport canals totaled close \$275,000 for repairs and cleanup.

The continual degradation to the riparian habitat along the Panoche and Silver Creek tributaries is described as a combination of poor soils, which do not allow adequate vegetative cover, heavy livestock congregation

in the riparian areas and recreation activities. Nearly two-thirds of the land use in the upper watershed is rangeland used for grazing both sheep and cattle. The Bureau of Land Management (BLM) manages nearly 30% of the upper watershed, for grazing, recreation, mining, and the protection of sensitive resources. In 1989, a Coordinated Resource Management and Planning (CRMP) program was formed to address the concerns of water quality, flooding, and erosion and sediment movement. The CRMP team includes city officials and residents of Mendota, landowners in the upper and lower watershed, local water districts, the Westside Resource Conservation District (WRCD), the U.S. BLM, the U.S. Bureau of Reclamation, the Natural Resources Conservation Service, the California Department of Water Resources, the California Department of Transportation, and the Fresno County Public Works Department. The CRMP's goal is to balance existing land use practices and develop realistic management strategies to reduce future water quality problems, erosion/ sediment movement, and flooding impacts in the Panoche/Silver Creek watershed. The proposed project is to extensively and thoroughly review and investigate the needs and feasibility of developing flood control mechanisms within the watershed boundaries to alleviate the continual flooding, erosion, and sediment transport to the Panoche Creek alluvial fan. Additionally, the study would include the most effective means of educating the land stewards to improving the management of the riparian habitats, rangeland vegetation, neotropical bird habitat, and water quality. The development of a Technical Advisory Committee, consisting of agencies personnel, local landowners, the WRCD, and the local water districts will assist the consultant hired to complete the Watershed Stewardship Enhancement Study in a timely and efficient manner.

Proposed Scope of Work

The WRCD is requesting a CalFed grant to conduct a detailed feasibility to analyze the benefits of several alternatives proposed to alleviate the watershed concerns and to refine the project recommendations and cost estimates for the proposed actions. The feasibility study will involve a detailed review of an existing hydrologic model of the watershed prepared for the U. S. Bureau of Reclamation in the early 1990s. The

hydrologic data would be used to review flood routing and recommend the combination of measures that will best protect the lower watershed from future flood events. The WRCD is also requesting the CalFed grant to fund a National Environmental Policy Act/ California Environmental Quality Act (NEPA/CEQA) review. Environmental evaluations have already been prepared summarizing the existing vegetation, wildlife, rare and endangered species, air quality, and water quality in the Panoche/Silver Creek watershed. Nevertheless, it is anticipated significant work is still required to prepare a cooperative environmental impact report that satisfies the NEPA and CEQA requirements of the CRMP's agency participants.

Currently, five alternatives are proposed for inclusion in the feasibility study. Although they are listed separately and will be reviewed as individual proposals, some combination of these measures may be necessary to meet the CRMP's objectives to decrease destruction of riparian habitat, reduce flood flows, improve water quality, improve the riparian habitat, reduce channel instability and improve upland management practices.

Alternative one is riparian habitat restoration throughout the watershed. Improved vegetative growth adjacent to the various creeks in the watershed should reduce flows, minimize erosion problems, and result in improved water quality. Reasons for the degraded riparian habitat in the Panoche and Silver Creek tributaries include a combination of poor soils, which do not allow adequate vegetative cover, heavy livestock congregation in the riparian areas, and recreation activities throughout the watershed.

Alternative two is the construction of erosion control structures on smaller tributaries in the upper watershed. The erosion control structures would consist of small structure constructed on tributary creeks to Silver and Panoche Creeks. These structures would reduce the peak flows of tributaries allowing for a continuing, more controlled flow down the watershed. Plate 9 indicates possible locations for some erosion control structures.

Alternative three is the construction of a single flood control dam to handle major flood events. Plate 9 indicates a possible location of a flood control dam. This facility would be designed and properly calculated for water storage capacity and future sediment storage capacity necessary as part of the feasibility study. Alternative four, a flood control proposal to reduce flooding impacts to Mendota. The proposal consists of constructing drainage channel south of Belmont Avenue then a three mile green belt channel to discharging flood flows into the Fresno Slough. Alternative five has been proposed by the Central Valley Project Improvement Act (CVPIA) Land Retirement Program. The U.S. BLM, the U.S. Bureau of Reclamation and the U.S. Fish and Wildlife Service are in the initial phase of developing a project for the construction of a riparian corridor along the Panoche Creek channel downstream of the California Aqueduct. This proposal would include acquiring land to provide flood control options for Panoche Creek and would serve as an open space greenbelt and wildlife corridor between the upper watershed and the Fresno Slough/San Joaquin River corridor.

The different alternatives represent a combination of results from the many studies completed on the watershed. The feasibility study will review more in depth and thoroughly how they will work in combination together to obtain the CRMP's goals. Alternatives one, two and four are considered the more important alternatives to consider. Alternative three has had extensive review in the past and will be challenging to meet all the necessary requirements to come to fruition. Alternative five is currently being reviewed by the Department of Interior, Land Retirement Team. The results from that review can be acquired and integrated into this study.

Location and/or Geographic Boundaries of the Project

The Panoche/Silver Creek Watershed (Plate 1 and 2) encompasses approximately 291,500 acres (455 square miles) on the West Side of the San Joaquin Valley in Fresno County and extends into the Diablo Mountain Range in San Benito County. The portion to the west of Interstate 5 is referred to as the upper watershed and the portion northeasterly of Interstate 5 is known as the lower watershed.

Expected Benefits

The construction of erosion control structures in the upper watershed could significantly reduce peak flows in the tributary streams, possibly reducing the present erosion and sediment transport occurring. A single flood control dam could reduce flooding in the lower watershed and prevent contaminated sediment from reaching the San Joaquin River. A flood control channel could re-route water around the city of Mendota, reducing property damage and road closures that have occurred frequently in the past. Stream channel restoration efforts will focus on optimum re-vegetation techniques for enhancing the riparian habitats. This will include the gradual elimination of non-native plant species which have invaded the watershed. Additional review and improvement in livestock management strategies throughout the upper watershed could enhance riparian wildlife habitat by reducing erosion and improving water quality in the tributary streams. Decreasing the continual contamination to the San Joaquin River by the highly contaminated water and soil would address a CalFed primary stressors. Improving the neotropical migratory bird habitat is an additional benefit evolved from any combination of the alternatives and would address CalFed's secondary priority species listed. The full range of benefits and costs associated with the various alternatives, however, still need to be identified. One of the purposes of the feasibility study is to identify and compare these benefits and costs.

Background and Ecological/Biological/Technical Justification

Over the years, Panoche Creek flooding has caused substantial damage, severely impacting the local economy. The financial damages have been primarily to the agricultural industry, \$1,500,000 of loss, but the flooding has also caused \$100,000 in public and private damages in Mendota and over \$200,000 in damages to the Westlands, Broadview and Firebaugh Canal Water Districts.

Although numerous studies have been prepared over the last 25 years, none of them have studied the watershed as a complete unit, involving all of the stakeholders in the process. The Panoche/Silver Creek

CRMP is using a comprehensive watershed management approach to improve the watershed. The study will address the specific ERPP objective listed below:

1. SECTION: ECOLOGICAL PROCESS VISIONS	
OBJECTIVE: Central Valley Streamflows	Page: 21
OBJECTIVE: Natural Floodplains and Flood Processes	Page: 40
OBJECTIVE: Upper Watershed Processes- Fire and Erosion	Page: 65
2. SECTION: HABITAT VISIONS	
OBJECTIVE: Riparian and Riverine Aquatic Habitats	Page: 106
OBJECTIVE: Agricultural Land	Page: 119
3. SECTION: SPECIES AND SPECIES GROUP VISIONS	
OBJECTIVE: Neotropical Migratory Bird Guild	Page: 264
4. SECTION: VISIONS FOR REDUCING OR ELIMINATING STRESSORS	
OBJECTIVE: Invasive riparian and salt marsh plants	Page: 304
OBJECTIVE: Contaminants	Page: 326

This project is a new project and will be monitored on a continual basis for success and follow through.

Monitoring and Data Evaluation

There is currently over 24 years of data collected concerning flows in Panoche Creek to be evaluated, in late 1997, the USGS installed a gaging station at Panoche Creek and the Interstate 5 bridge to continue data collection. Panoche Creek's water quality is currently being monitored, and will continue to be through the implementation phase. The success of habitat restoration projects will be monitored on a seasonal basis, factoring the ability to withstand flood impacts and the added value toward migratory birds and wildlife habitat. A monitoring plan will be written as part of the NEPA/CEQA process, using an adaptive management approach to test whether objectives are being met.

Implementability

Currently, landowners implementing trial plots for sedimentation and erosion control programs. In addition, landowners in the upper watershed have expressed support and willingness to develop structures on their properties. This proposed study will benefit from the results of the CVPLA Land Retirement Team feasibility study on the Panoche Creek Riparian Corridor proposal.

The Panoche/Silver Creek CRMP is proposing a comprehensive feasibility study and coordinated NEPA/CEQA review that will incorporate the efforts of many of the agencies, organizations and interest groups working in the watershed. The CRMP believes that a total watershed management approach is the most effective method for addressing problems in the watershed. Compliance with all the law, regulations, and permitting processes would be reviewed during the NEPA/CEQA preparations

Costs and Schedule to Implement Proposed Project

Budget Costs

The basis for CalFed funding is the need to complete the needs and feasibility study in a timely manner to ensure the results are implemented. The Panoche/Silver Creek Watershed has waited over forty years to have restoration work completed for vegetative and wildlife habitat, riparian habitat and agricultural lands. The watershed has gone ignored long enough and now need assistance to recover the watershed to a healthy state. Attached is a full budget to complete the Phase One of the project (Table 1.). Once the Stewardship Enhancement Feasibility Study is completed, Phase Two will be obtaining all the proper permits and developing an Issue for Bid Package, including specification of plans and drawings. Phase Three would be the implementation of the Bid Package for design and construction.

The contingency plan for anticipated current funding and future funding needs is to apply for funding from: the legislative allocation for flood control activities, the CVPIA for the continued development of the project, the Wildlife Conservation Board and the National Fish and Wildlife Foundation will be solicited for funding for the Operation and Maintenance of the project. Currently, there are no subcontract bids for this project.

Schedule Milestones

The schedule milestones are as follows: Start date: March 1, 1999, with an end date of August 30, 2000. Completion of Task one through Task three: April 19, 1999, with a status report on the information acquired in the investigation, including what the hydrological data concluded, the current environmental

status of the watershed (eg. Endangered species listings, established preserves or easements, geologic conditions, soil types, etc.). Completion of Task four: May 3, 1999, with a review of the components necessary for the vegetation, wildlife and riparian habitat restoration. Completion of Task five: June 28, 1999, with the recommendations of the design and site(s) of the erosion control structures in the upper watershed. Completion of Task six: July 26, 1999, with the recommendations of the design and site of the flood control dam, including the geotechnical information, the adherence to the Endangered Species Act, and other State and Federal guidelines for a dam structure. Completion of Task seven: August 16, 1999, with a recommendation of the design and site of the structure, including details on the discharge of the water and the land acquisition necessary. Completion of Task eight: September 13, 1999, with comments from review of the CVPIA Land Retirement Teams corridor feasibility report recommendations and the alteration in scale with the inclusion of another alternative. Completion of Task nine: September 27, 1999, with a report identifying any additional options available to accomplish the CRMP's goal for the watershed. Included in the list would be the feasibility of the project, specific specifications and definition of the project. Completion of Task ten: December 6, 1999, with a detail report on how the different alternatives complement each other, which alternatives should be used. Completion of Task eleven: February 15, 2000, including a detailed schematic design of the combination of alternatives and how that will work on a watershed basis and in combination of the other projects be implemented. Completion of Task twelve: August 30, 2000, with a NEPA/CEQA document created by the private consulting firm in cooperation with the State and Federal agencies listed above to have one complete document. This document should be completed to support requirement for the permitting process. All of the progress reports will include an implementation budget.

The payment schedule for the study will be based on the completion of tasks on time. With the completion of each task, a progress report will be provided along with an invoice for billing. Payment will be made based upon approval of the report by the Westside Resource Conservation District Board of Directors.

Third Party Impacts

The third party impacts would need to be reviewed as the tasks are completed. Currently, to identify or quantify the third party impacts is difficult because it is unknown at this time what alternatives will be implemented. Currently, three studies are underway that may be able to answer this question. They are a sedimentation study, a water quality study, and the feasibility study for the Panoche Creek Corridor project.

Applicant Qualifications

The proposal would be implemented through a combined efforts of the Westside Resource Conservation District (WRCD) and the Panoche/Silver Creek Watershed Coordinated Resource Management and Planning (CRMP) team. The combination of the two organizations include the use of resources from the Natural Resource Conservation Services, the BLM, Bureau of Reclamation, City of Mendota, Silver Creek Drainage District, local water districts, the California Department of Transportation, Fresno County Public Works, lower and upper watershed landowners, and a full time coordinator for the project. The manager of the WRCD, Morris Martin, will be responsible for the administration of the contract. The Federal and State agency representatives to the CRMP will serve on the Technical Advisory Committee and be responsible for the technical information on the project. The project management will be the responsibility of the CRMP coordinator, Nettie R. Drake, and WRCD manager, Morris Martin, and an individual from the engineering firm hired to perform the study. The qualifications of the individuals involved are extensive. Morris "Red" Martin, after 32 years with the Soil Conservation Service, retired as the Area Conservationist for the San Joaquin Valley and Eastern California. He has been manager of the WRCD for 8 years and has administered 11 state and federal grants totaling \$882,481. He comes to the project with extensive knowledge concerning the historical events in the Panoche/Silver Creek Watershed and the San Joaquin Valley. He is a certified Professional in Erosion and Sediment Control, from the Soil and Water Conservation Society and International Erosion Control Association.

Nettie R. Drake has been the full time coordinator for the Panoche/Silver Creek CRMP for the last two and a half years. During that time, the CRMP has completed a set of By-Laws, goals for a Plan of Work, obtaining a 205(J) grant for the sedimentation study, three grants for continuous financial support for a full time coordinator, on the ground projects with landowners for erosion and sediment control programs, the development of the Clinic Program through CSU, Fresno School of Agricultural Science and Technology, funding for the construction of a gaging station on Panoche Creek and another year of operation and maintenance, a positive public image and support from the local, state and federal agencies and legislators. David A. Durham, has been a Soil Conservationist for the Natural Resources Conservation Service for 18 years. He has a Bachelor of Science degree in Agriculture with an emphasis in Range Management. He has worked extensively with irrigated agriculture and developing practices for conservation programs for land use. He has served on the CRMP for the last two years as a member of the Steering Committee and Technical Advisory Committee. David has been instrumental in the development and implementation of the Riparian Habitat Development project with the Clinic Project.

Tim Moore, is the Hazardous Materials Specialist with the Bureau of Land Management. He has a Bachelor of Science degree in Geology and holds the appropriate certificates for his position. He works with the P/SC, Arroyo Pasajero and, Pajaro CRMPs on their Technical Advisory Committees. He is the Chairman of the Technical Proposal Evaluation committee for the BLM and leads the Atlas Mine Superfund site evaluation team. Tim brings extensive knowledge in contaminants to soil and water and how to manage the problem to the project.

Karen J. Brown, is an Environmental Specialist for the Department of Water Resources, and hold a Bachelor of Science degree in Natural Resource Management and a Bachelor of Arts in English. She also has a Technical certificate in Technical Communications. She brings an extensive background in wildlife biology and management. Karen works with the Arroyo Pasajero and P/SC CRMPs developing to develop wildlife

and riparian habitat programs. She has completed Threatend & Endangered Species management and environmental awareness training programs.

Charles F. McCullough, has a certificate in Agricultural Engineering, and is a rancher and landowner in the upper watershed. He has lived in the watershed for over forty years, and has raised sheep and cattle on the rangeland and farmed in the Panoche Valley. He was elected to a two year term on the BLM Grazing Advisory Board for the Hollister Resource Area, and three years on the Bakersfield District Advisory Committee incoming 35 counties. He has been a member of the CRMP from its inception and is now serving as the Chairman. He is a member of the San Benito County Land Conservation Committee, and has served 18 years on the San Benito County Fish and Game Commission. He has been extensively involved in the management protocol of the public lands and on private property.

Compliance with standard terms and conditions

Upon discussion with Mr. Joe Karkoski, Environmental Engineer, with the Environmental Protection Agency, Water Division in the Northern California Office. He indicated the EPA would not be requiring or requesting forms with this application but would require the proper forms with the awarding of grant.

Table 1. Cost Estimate for the Panoche/Silver Creek Watershed Stewardship Enhancement Feasibility Study.

Project Tasks	Direct Labor Hours	Direct Salary and Benefits	Miscellaneous and other Direct Costs	Service Contracts	Overhead Labor (General, Admin. and fees)	Materials and Acquisition Contracts	Total Cost
FEASIBILITY STUDY							
Task 1. Initial meeting(s) to refine scope of watershed feasibility study.	80	\$1,400	\$0	\$10,000	\$2,280	\$0	\$13,680
Task 2. Detailed review of hydrologic models.	120	\$2,100	\$30,000	\$0	\$6,420	\$0	\$38,520
Task 3. Review and summarize existing environmental data.	80	\$1,400	\$0	\$10,000	\$2,280	\$0	\$13,680
Task 4. Develop riparian habitat restoration options - Alternative 1.	80	\$1,400	\$0	\$10,000	\$2,280	\$0	\$13,680
Task 5. Develop specific recommendations on the construction of erosion control structures in the upper watershed - Alternative 2.	320	\$5,600	\$200,000	\$40,000	\$49,120	\$0	\$294,720
Task 6. Review and refine options for the construction of a single flood control dam - Alternative 3.	160	\$2,800	\$100,000	\$20,000	\$24,560	\$0	\$147,360
Task 7. Review and refine options for the construction of a Greenbelt around Mendota - Alternative 4.	120	\$2,100	\$100,000	\$20,000	\$24,420	\$0	\$146,520
Task 8. Review and refine options for the construction of riparian corridor along the Panoche Creek channel - Alternative 5.	160	\$2,800	\$10,000	\$5,000	\$3,560	\$0	\$21,360
Task 9. Review and refine currently unidentified options.	80	\$1,400	\$10,000	\$5,000	\$3,280	\$0	\$19,680
Task 10. Summarize the benefits and costs of the various alternatives and recommend an optimum solution to minimize flooding impacts from Panoche Creek.	400	\$7,000	\$0	\$40,000	\$9,400	\$0	\$56,400
Task 11. Develop a schematic design for implementation of the optimum solution.	400	\$7,000	\$30,000	\$10,000	\$9,400	\$0	\$56,400
NEPA/CEQA							
Task 12. Prepare NEPA and CEQA documentation for the recommended alternatives.	880	\$15,400	\$0	\$100,000	\$23,080	\$0	\$138,480
TOTAL BUDGET	2880	\$50,400	\$480,000	\$270,000	\$160,080	\$0	\$960,480

1-010627

1-010627

MEMBERS
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California Legislature

Senate Committee

on

Agriculture and Water Resources

JIM COSTA
CHAIRMAN

CONSULTANTS
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June 24, 1988

Mr. Lester Snow
CALFED
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear Lester,

This is to support the application for funds by the Panoche Silver Creek Coordinated Resource Management and Planning team to conduct further feasibility studies on that watershed.

Located on the West side of the San Joaquin Valley, floodwaters from this area transport siltation and naturally occurring selenium to the detriment of agricultural lands, farm-based jobs, and the San Joaquin River. Waters have also threatened the California aqueduct and other significant state and federal investments.

Cost-effective improvements to this watershed have the opportunity to reduce peak flows and prevent contaminated sediment from reaching the San Joaquin River. In this manner, successful projects can assist CALFED in reaching the goal of reducing impacts on processes, habitats, and species in the Bay-Delta ecosystem.

Thank you for your consideration of the team's request.

Sincerely,



JIM COSTA
Chairman

JCW

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Assembly
California Legislature



ROBERT PRENTER
ASSEMBLY MEMBER, THIRTIETH DISTRICT

VICE-CHAIR:
ASSEMBLY COMMITTEE ON ENVIRONMENTAL
SAFETY AND TOXIC MATERIALS

MEMBER:
ASSEMBLY COMMITTEE ON AGRICULTURE
ASSEMBLY COMMITTEE ON HEALTH
ASSEMBLY COMMITTEE ON HOUSING
AND COMMUNITY DEVELOPMENT

June 25, 1998

Mr. Lester Snow, Executive Director
CALFED Bay Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

RE: Panoche/Silver Creek Watershed: Flood Control Feasibility Study

Dear Mr. Snow:

It has come to my attention that Westside Resource Conservation District is seeking a CalFed Grant to finance a feasibility study for flood control.

The Panoche/Silver Creek Watershed encompasses approximately 291,506 acres on the West Side of the San Joaquin Valley in Fresno County, extending up into the Diablo Mountain Range in San Benito County. Over the years the Panoche Creek flooding has caused financial damages, primarily agricultural in nature, amounting to \$1,500,000. Additionally, public and private property damage has been in excess of \$300,000.

The funding from CalFed would be used to evaluate several habitat restoration and contaminant reduction alternatives. There are several proposed projects to be studied and evaluated for benefits and costs. The study may show that no one alternative will be effective on its own and that a combination of measures is necessary to address watershed problems.

Landowners in the upper watershed have expressed support and willingness to develop structures on their properties. I strongly support this effort as it is vital to control flooding in this area and I would encourage your thoughtful consideration of this request.

Sincerely,

ROBERT PRENTER
Assemblymember, Thirtieth District

RF:kh

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I-010629

SILVER CREEK DRAINAGE DISTRICT

P.O. BOX 97
MENDOTA, CALIFORNIA 93640
(916) 935-4701 066-7246

June 24, 1998

Mr. Lester Snow
Executive Director
CALFEID Bay Delta Program
1416 Ninth Street, Suite 1155
Sacramento, California 95814

Dear Mr. Snow:

The Silver Creek Drainage District, supports the proposal being submitted by the Westside Resource Conservation District on behalf of the Panoche - Silver Creek Coordinated Resource Management and Planning Group

This proposal is a significant step in reducing flooding impacts to the Silver Creek Drainage District and surrounding agricultural lands. This is a serious resource problem affecting the long-term agricultural drainage problems of the Panoche Creek alluvial fan. Estimates indicate flooding can potentially affect 6,500 agricultural acres in a 10-year flood event and up to 30,000 acres in a 100-year flood. Using estimated 1998 damages of \$370 per acre. Total agricultural damages are likely to range from \$2,400,000 to \$ 1,100,000 for the 10 year and 100-year floods. The water and sediment from this watershed are high in salts, boron and selenium and continue to be released to the San Joaquin River and deposited on the agricultural lands. Studies suggest flood runoff and resulting sediment deposits continue to recharge and degrade the parched ground water quality.

The June 17, 1998 tour of this area that you and members of the Bay-Delta Advisory Council participated in, demonstrated the remarkable progress farmers and water districts are making to help preserve the most productive agricultural land in the state and at the same time conserve and protect our most precious water supply.

Thank you for your consideration of our support for this project.

Sincerely,



Tom Jagers
President, Silver Creek Drainage District

1 - 0 1 0 6 3 0

1-010630

FIREBAUGH CANAL WATER DISTRICT

P.O. Box 97 - 2412 Dos Palos Rd. (Hwy 33)
Mendota, California 93640
(209) 655-4761 : 659-1245
FAX: 209-655-3656

June 24, 1998

Mr. Lester Snow
Executive Director
CALFED Bay Delta Program
1416 Ninth Street, Suite 1155
Sacramento, California 95814

Dear Mr. Snow:

The Firebaugh Canal Water District, a San Joaquin River Exchange Contractor, supports the proposal being submitted by the Westside Resource Conservation District on behalf of the Panoche - Silver Creek Coordinated Resource Management and Planning Group.

This proposal is a significant step in reducing flooding impacts to the Firebaugh Canal Water District and surrounding agricultural lands. This is a serious resource problem affecting the long-term agricultural drainage problems of the Panoche Creek alluvial fan. Estimates indicate flooding can potentially affect 6,500 agricultural acres in a 10-year flood event and up to 30,000 acres in a 100-year flood. Using estimated 1998 damages of \$370 per acre. Total agricultural damages are likely to range from \$2,400,000 to \$11,100,000 for the 10 year and 100-year floods.

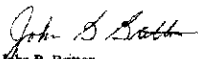
The water and sediment from this watershed are high in salts, boron and selenium and continue to be released to the San Joaquin River and deposited on the agricultural lands. Studies suggest flood runoff and resulting sediment deposits continue to recharge and degrade the perched ground water quality.

The June 17, 1998-tour of this area that you and members of the Bay-Delta Advisory Council participated in, demonstrated the remarkable progress farmers and water districts are making to help preserve the most productive agricultural land in the state and at the same time conserve and protect our most precious water supply.

Continued flooding from the Panoche - Silver Creek watershed makes meeting load targets and water quality objectives almost impossible.

Thank you for your consideration of our support for this project.

Sincerely,


John B. Britton
President, Firebaugh Canal Water District



June 26, 1998

Mr. Lester Snow
Executive Director
CALFED Bay Delta Program
1416 Ninth Street, Suite 1155
Sacramento, California 95814

Dear Mr. Snow:

The California Department of Water Resources, San Joaquin District, supports the proposal being submitted by the West Side Resource Conservation District for Category III funding for the Panoche/Silver Creek watershed flood control feasibility study. The Panoche/Silver Creek watershed is a principal source of salt, selenium, and other trace elements that continue to contribute to San Joaquin water quality problems. Uncontrolled flooding in the watershed is a continuing problem for State and local governments, as well as residents of the area. Such flooding leads to road closures, crop losses, and damage to residential, commercial and public property, roads, irrigation canals, and other utilities. Solutions to the flood control problem could become a focal point for resolving local unemployment, water supply, and agricultural drainage problems.

The completion of the studies described in this proposal will constitute a necessary and important step towards resolving water quality problems associated with the San Joaquin River. It will also help solve local economic and social problems that persist, in spite of continued efforts to find consensus solutions.

Thank you for considering our support for this project.

Sincerely,


Louis A. Beck, Chief
San Joaquin District



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

4625 W. Jennifer, Suite 125
Fresno, CA 93722
(209) 276 - 7494
(209) 276 - 1791 FAX

Date: June 29, 1998

Mr. Lester Snow
Executive Director
CALFED Bay Delta Program
1416 Ninth Street, Suite 1155
Sacramento, California 95814

Dear Mr. Snow,

The Natural Resources Conservation Service, Fresno Field Office, supports the proposal being submitted by the West Side Resource Conservation Service for Category III Funding for the Panoche/Silver Creek Watershed Stewardship Enhancement Feasibility Study.

The Panoche/Silver Creek watershed is a principal source of selenium and sediment which contribute to water quality problems in the San Joaquin River. Uncontrolled flooding in the lower watershed is a continuing problem for State and local governments, as well as residents in the area. This flooding leads to water quality problems for the San Joaquin River, huge crop losses, road closures, and severe damage to residential, commercial, and public property, as well as irrigation canals and pumps, and other utilities.

The completion of the Panoche/Silver Creek Watershed Stewardship Enhancement Feasibility Study is a vital step towards resolving water quality problems associated with the San Joaquin River. It will also help solve persistent local economic and social problems.

Thank you for considering our support for this project.

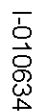
Sincerely,

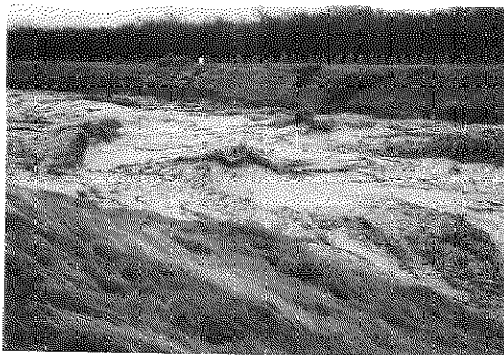
For [Signature] R. Meneses
Frank Meneses
District Conservationist

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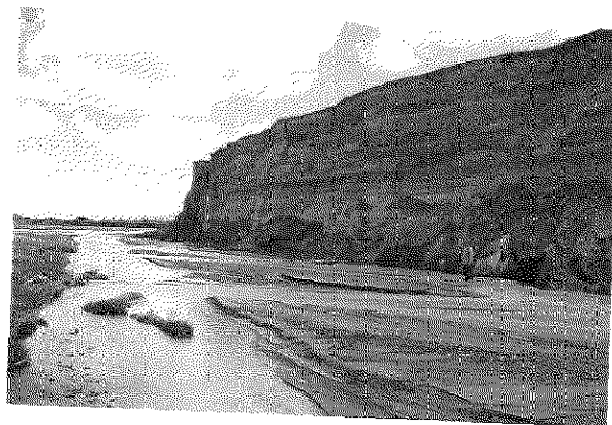
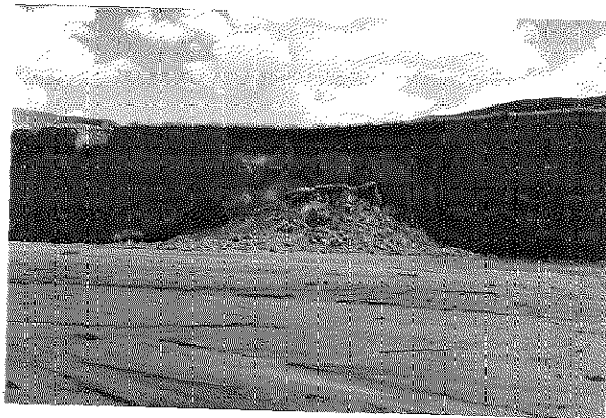
2/3/98 Panoche/Silver Creek at I-5 8:00 am 17,000 cfs±



3/19/98 Silver Creek Bank Erosion Approximately 5 Miles Upstream of I-5



3/19/98 Looking up the Silver Creek channel at the confluence with Panoche Creek



3/19/98 Panoche Creek Bank Erosion and Sloughing
Approximately 1/2 mile upstream of I-5



2/11/98 Looking East along Belmont Avenue between Highway 33 and 180

